

DNA Encoding TRIP ¹

Signal Transducer for the TNF Super Family, and Uses Thereof

DOMESTIC PRIORITY CLAIM

The priority of U.S. Provisional Applications No. 60/042,293 and No. 60/042,747 is claimed.

TECHNICAL FIELD OF THE INVENTION

The present invention relates generally to isolation and utilization of novel proteins, and more particularly to a unique receptor-signaling-complex component referred to as the tumor necrosis factor receptor associated factor interacting protein.

BACKGROUND OF THE INVENTION

Members of the TNFR (Tumor Necrosis Factor Receptor) superfamily play important roles in the induction of diverse signals leading to cell growth, activation and apoptosis. Smith et al., *Cell*, 76:959-962 (1994). Whether the signals induced by a given receptor leads to a cell's activation or death is highly cell-type specific and tightly regulated during differentiation of the cell. For example, the TNFRs can exert co-stimulatory signals for proliferation of naive lymphocytes, but can also induce death signals required for deletion of activated T lymphocytes. Smith et al., *Cell*, *Id*.

The cytoplasmic domains of these receptors lack intrinsic catalytic activity and generally exhibit no significant homology to each other or to other known proteins. Exceptions to this include Fas(CD95) and TNF-R1 which share significant homology within an 80 amino acid region of their cytoplasmic tails, referred to in the art as the "death domain." Tartaglia et al., *Cell*, 74:845-853 (1993); Itoh et al., *J. Biol. Chem.* 268:10932-10937 (1993). Therefore, the TNFR family members are believed to initiate different signal transduction pathways by recruiting different types of intra-